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Application Serial No. 09/045,036  
Attorney Docket No.: 97-558

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

CUSTOMER NO. 22927

Applicants: Walker et al.  
Application No.: 09/045,036  
Filed: March 20, 1998  
Title: METHOD AND APPARATUS FOR FACILITATING THE PLAY OF  
FRACTIONAL LOTTERY TICKETS UTILIZING POINT-OF-SALE  
TERMINALS  
Attorney Docket No. 97-558

Group Art Unit: 3622  
Examiner: J. Young

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO ORDER  
RETURNING UNDOCKETED APPEAL TO EXAMINER**

Dear Sir:

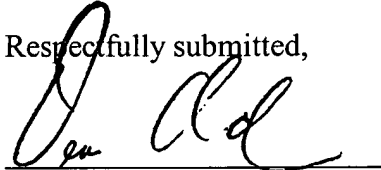
Responsive to the Order Returning Undocketed Appeal to Examiner, mailed by USPTO on July 19, 2004, please find enclosed for your consideration and acceptance the copy of reference as requested:

1. Complete article from The Economist, June 13, volume 323, pg. 74, "Heads I win, tails you lose".

If the Examiner has any further questions, the Examiner is invited to contact the undersigned at (203) 461-7337. Please charge any fees that may be required for this paper, or with any other papers filed in connection with this application to Deposit Account No. 50-0271.

November 18, 2004  
Date

Respectfully submitted,



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-- Source: News &amp; Business &gt; News &gt; By Individual Publication &gt; E &gt; The Economist

Terms: "june 13, 1992" and 74 (Edit Search)

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*The Economist*, June 13, 1992Copyright 1992 The Economist Newspaper, Ltd.  
The Economist**June 13, 1992****RECEIVED**

NOV 30 2004

**GROUP 3600****SECTION:** Business, finance and science; BUSINESS; Pg. 74 (U.K. Edition Pg. 84)**LENGTH:** 456 words**HEADLINE:** Heads I win, tails you lose**BODY:**

SHOP-OWNERS, trouser-wearers and anyone who has stared at a supermarket ceiling while the old lady in front explores the depths of her purse can agree on one thing: small change is a big pain. Naive geniuses will have realised that there is an easy way to abolish it: round the amount of every transaction up or down to the nearest pound (or dollar, or whatever). But this could be inefficient, especially for the pricing of smaller items, whose price would, in effect, be limited to multiples of a country's smallest banknote. Now, thanks to Michael Rossides, an inventor based in Washington, DC, the need for change can be fairly, efficiently and ingeniously eliminated in most circumstances. The only trouble is that it is too logical to catch on.

The key to his idea is a benign form of gambling. When a shopper goes to pay for his goods, he randomly picks a number from 1 to 100. The shop's electronic cash register is programmed to do the same. These two numbers are then added to make a third. (If their sum is greater than 100, then 100 is subtracted from it to produce the third number.) If this third number is less than or equal to the amount of change in the price, the price is rounded up. If it is more, the price is rounded down. Thus suppose the purchase is for \$ 1.46. If the shop's and customer's combined random number is less than or equal to 46, the price is rounded up to \$ 2. If it is more than 46, the price is rounded down to \$ 1. The iron laws of probability ensure that both parties get a fair deal in the long run. Over hundreds of purchases a shopper will pay almost exactly what he would have done if change had been used.

It sounds complicated, but isn't. All a shopper has to do is say a number instead of fumbling for change. Since the shop has no control over the number picked by the shopper (and vice versa), neither needs to trust the other to pick randomly. In a test of the idea at the cafe of Northwestern University's Kellogg School of Management in Evanston, Illinois last month, customers chose to use Mr Rossides's system for payment about half of the time. He is now looking for venture capital to pay for legal advice on the status of such gambling, and to build a prototype of a coinless cash register.

Mr Rossides has thought up many further economic applications of the principle, such as a way to reduce the number of transactions made in electronic-payment systems by the use of fair gambling. And why stop there? Lady Luck can simplify all sorts of transactions. The late Norman Steenrod, a topologist at Princeton University, once suggested that criminals receive not jail sentences but a specified chance of execution. Chances are, he was joking.

**GRAPHIC:** Illustration, no caption